

# COMPARATIVE ANALYSIS OF FUNCTIONAL OUTCOME OF INTERCONDYLAR FRACTURE DISTAL HUMERUS BY PLATE OSTEOSYNTHESIS USING TRAP APPROACH AND OTHER POSTERIOR APPROACHES

DEPARTMENT OF ORTHOPAEDICS AND TRAUMATOLOGY ,GOVT RAJAJI  
HOSPITAL ,MADURAI

## ABSTRACT

**BACKGROUND:** This study aimed to evaluate the functional outcomes of patients with intra-articular distal humerus fractures treated with triceps-reflecting anconeus pedicle (TRAP) and olecranon osteotomy

**METHODS:** Twenty patients with intra-articular distal humerus fractures were prospectively analyzed. TRAP approach was used in 10 patients (6males, 4females;

mean age 40.1 years, range 17–70), and olecranon osteotomy in 13 patients (9 males, 4 females; mean age 35.4 years, range 18–62). Fractures were classified using the AO/ASIF classification. Functional results were evaluated with the Mayo elbow performance score (MEPS)

**RESULTS:** The overall mean arc of elbow motion was  $108^{\circ}$  (range  $70^{\circ}$ – $140^{\circ}$ ) in the TRAP group, whereas that of the olecranon osteotomy group was  $98^{\circ}$  (range  $70^{\circ}$ – $115^{\circ}$ ). A significant difference was observed between the two groups in terms of overall mean arc of elbow motion ( $p=0.038$ ). There were no significant differences noted between the two groups in terms of mean MEPS and DASH scores ( $p=0.412$ ,  $p=0.201$ , respectively). The overall complication rate was 27.2% in the TRAP group and 55% in the olecranon osteotomy group

**CONCLUSION:** TRAP is a successful approach in the treatment of intra-articular distal humerus fractures

that provides better arc of elbow motion, reduces complications and reoperation rates.

Key words: Distal humerus; internal fixation; intra-articular fracture; olecranon osteotomy; TRAP